

CONTRACTING: CREATING GAPS IN EXPEDITIONARY WARFIGHTING CAPABILITY

BY

LIEUTENANT COLONEL RICHARD A. ELLIS
United States Army

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USAWC CLASS OF 2011

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U.S. Army War College, Carlisle Barracks, PA 17013-5050

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REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 01-03-2011		2. REPORT TYPE Strategy Research Project		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Contracting: Creating Gaps in Expeditionary Warfighting Capability				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Lieutenant Colonel Richard A. Ellis				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Professor Bernard Griffard Center for Strategic Leadership				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army War College 122 Forbes Avenue Carlisle, PA 17013				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The Army, through expanded use of CLS for services and organic maintenance, has created the potential for capability gaps in critical support systems required for the execution of scenarios like containing a mass migration of refugees from Mexico into the U.S., and possibly more serious expeditionary situations significant to U.S. national security interests. Illustrative of these emerging gaps is the Army's use of CLS to meet Bulk Class III and field feeding requirements along with combat vehicle and aviation maintenance support. CLS initiatives such as these are setting the stage for downstream impacts on unit training capability, operational employability, and personnel retention rates.					
15. SUBJECT TERMS Logistics, Petroleum, Aviation					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UNLIMITED	18. NUMBER OF PAGES 28	19a. NAME OF RESPONSIBLE PERSON Professor Bernard F. Griffard
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code) (717) 245-3235

USAWC STRATEGY RESEARCH PROJECT

**CONTRACTING: CREATING GAPS IN EXPEDITIONARY WARFIGHTING
CAPABILITY**

by

Lieutenant Colonel Richard A. Ellis
United States Army

Professor Bernard F. Griffard
Project Adviser

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U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: LTC Richard A. Ellis
TITLE: Contracting: Creating Gaps in Expeditionary Warfighting Capability
FORMAT: Strategy Research Project
DATE: 1 March 2011 WORD COUNT: 5,401 PAGES: 28
KEY TERMS: Logistics, Petroleum, Aviation
CLASSIFICATION: Unclassified

The Army, through expanded use of CLS for services and organic maintenance, has created the potential for capability gaps in critical support systems required for the execution of scenarios like containing a mass migration of refugees from Mexico into the U.S., and possibly more serious expeditionary situations significant to U.S. national security interests. Illustrative of these emerging gaps is the Army's use of CLS to meet Bulk Class III and field feeding requirements along with combat vehicle and aviation maintenance support. CLS initiatives such as these are setting the stage for downstream impacts on unit training capability, operational employability, and personnel retention rates.

CONTRACTING: CREATING GAPS IN EXPEDITIONARY WARFIGHTING CAPABILITY

We will enable our divisions to dominate across the full spectrum of operations by providing them the agility and the versatility to transition rapidly from one point on that spectrum to another with least loss of momentum.¹

General Eric K. Shinseki
Chief of Staff, U.S. Army
October 12, 1999

The nature of war is always changing. What will never change is the desire of the American people to fight them outside the United States. The Army will always need an expeditionary logistics capability to support operations abroad. The current conditions in Iraq and Afghanistan continue to support the position that contracted logistics services are an acceptable manpower alternative to Soldiers. Army leaders need to understand that the next operation may occur in a less permissive environment, and that Army sustainment forces must be postured to support it.

The Army transformation set in motion by General Shinseki is undergoing the ultimate test: extended combat operations in two major theaters of war sustained by a heavy reliance on contracted logistical support (CLS). This reliance is creating capability gaps across the spectrum of expeditionary warfighting capability. Gaps that could materially impact mission capabilities should the current situation on the Mexico-US border deteriorate further.

Sometimes referred to as “America’s Third War”, Drug related violence on the United States / Mexican border is at an all-time high and escalating². Every news cycle brings stories of atrocities and chaos previously reserved for third world countries on

distant continents. The current death toll caused by Mexican drug cartel related violence is estimated to be approximately 28,000.³ Violence against Americans in border towns like Tijuana and Ciudad Juarez is on the rise. The level of violence has even effected U.S. State Department operations in Mexico. In March 2010, an American employee of the U.S. Consulate and her husband were killed in Juarez, leading to a decision by the State department to evacuate U.S. dependents from six Consulates across Mexico.⁴ Since taking office in December 2006, President Felipe Calderon has waged an all-out offensive on drug cartels in Mexico, employing more than 40,000 soldiers and 5,000 federal police in an attempt to eradicate drugs and interdict drug trafficking.⁵ Any success he has achieved has been overshadowed by the size and scope of the violence that permeates the country. There is growing concern in Mexico that the government may be losing control in some parts of the country, especially in Northern border towns. In September 2010, after the death of a photographer in Juarez, the editor of the El Diario newspaper printed an editorial to the drug cartels declaring, "You are, at present, the de facto authorities in this city."⁶

With the continuing deterioration of conditions in Northern Mexico, the likelihood of a sizable ungoverned region along the Southern U.S. border becomes a very real possibility. A spike in drug related violence, coupled with lack of confidence in the Mexican Government, could fuel panic among the Mexican population and lead to massive flow of refugees into the rugged, lightly monitored spaces in the southern areas of Texas, Arizona, New Mexico, and California.

The U.S. Customs and Border Protection Agency is currently tasked to protect the 1,933 mile U.S.-Mexican border, which spans some of the most remote and

inhospitable territory in America.⁷ This mission must be accomplished on the southern border without much assistance from Mexican authorities. Due to the current level of commitment by the active component of the Army in Iraq and Afghanistan, the weight of combating any refugee incursions into the U.S from Mexico would fall on the Army National Guard and Reserve. If the United States were forced to deal with a massive, uncontrolled flow of refugees into the southern Border States, the Army could face an issue with its capability to logistically support humanitarian and border security operations.

The Army, through expanded use of CLS for services and organic maintenance, has created the potential for capability gaps in critical support systems required for the execution of scenarios like containing a mass migration of refugees from Mexico into the U.S., and possibly more serious expeditionary situations significant to U.S. national security interests. Illustrative of these emerging gaps is the Army's use of CLS to meet Bulk Class III and field feeding requirements along with combat vehicle and aviation maintenance support. CLS initiatives such as these are setting the stage for downstream impacts on unit training capability, operational employability, and personnel retention rates.

Background

General Shinseki's transformation speech at the October 1999 Association of the United States Army Convention signaled a shift in the future direction of the Army. The momentum for transformation had begun in the early 1990s under General Gordon R. Sullivan with the Force XXI initiative, and sustained under his successor, General Dennis J. Reimer.⁸ The elements of the Chief of Staff's speech indicated serious

contemplation of the major military events of the 1990s, but most significantly the deployment of Task Force Hawk to Albania earlier that year.

With the arrival of President Bush's Secretary of Defense (SECDEF), Donald Rumsfeld, in 2001, the pace and scope of the Chief of Staff's vision gained momentum as it meshed with the new SECDEF's transformational ideas. Over the next five years he would begin to move the Armed Forces into a force projection posture, redeploying forces to the Continental United States from Overseas. The terrorist attacks on 9/11, and the initiation of Operation Enduring Freedom (OEF) in Afghanistan, drove the pace of Army Transformation, and provided momentum for Chief of Staff of the Army General Peter J. Schoomaker's modularity efforts in 2004.

The legacy of September 11, 2001, is a campaign that has kept the Army continuously deployed in two Theaters of operation for almost eight years. OEF and Operation Iraqi Freedom (OIF) had unintended consequences on Army Transformation. Fought with small, technically superior, rapidly deployable forces, OEF reinforced Secretary Rumsfeld's vision. In planning for the war in Iraq, the SECDEF believed that "rapid defeat ...on his terms would break the spine of Army resistance to his transformational goal."⁹ The future impact of transformation initiatives on the Army's logistics capability must have looked ominous to those in the support community as the U.S. rapidly geared up for a second war in Southwest Asia.

Task Force Hawk and the Logistics of Expeditionary Warfare

"We can begin to aggressively reduce the size of our deployed support footprint...if we don't deploy it, some maneuver commander won't have to feed it, fuel it, move it, house it, or protect it. It is our intent that units deploy essentially with their fighters and their critical support needs."¹⁰

General Shinseki's comments, heavily influenced by the lessons learned from the Task Force Hawk deployment, represent a significant shift in sustainment doctrine. In March 1999, General Wesley Clark, NATO Commander, requested the deployment of an Apache Aviation Task Force into Albania to provide supplementary anti-armor support against threats in Kosovo.¹¹ Unfortunately, this relatively straightforward organization would begin to suffer growing pains. Concerns over force protection and sustainment capability for the task force would eventually push the personnel count to over 5,300, augmenting an already robust organization with "additional assets whose deployment was deemed essential for supporting the Apaches."¹² Task Force Hawk's support assets included no fewer than nine maneuver or combat support companies or platoons, an additional combat service support team, and more than thirty-four tracked vehicles.¹³ This deployment provided two very big takeaways. First, it revealed what outgoing Army Chief of Staff Dennis J. Reimer called a "need for more adaptive force packaging methodology."¹⁴ Secondly, it demonstrated that heavy forces are not easily or rapidly deployable by air. Task Force Hawk required more than 500 C-17 sorties to close in Albania, at a cost of more than \$254 million dollars.¹⁵

General Shinseki's initial vision, and his successors' modularity efforts, ultimately turned the Army's focus toward a more robust Brigade Combat Team (BCT) logistics capability as the solution to the logistics footprint problem. The transformed force would incorporate additional transportation and maintenance assets into the BCT to reduce overhead, and to a certain extent, solve the deployment packaging problem. These additional assets traditionally existed in Echelons Above Brigade logistical units. This new concept for logistics would have two impacts on the support community. First, BCT

focused logistics created a lack of energy or enthusiasm for critical Theater level logistical enablers, including bulk petroleum and water storage and distribution capabilities. Secondly, Army transformation impacted the equipment acquisition process, creating a greater reliance on CLS maintenance to accomplish new vehicle and aircraft procurements. These factors play a key role in the Army's ability to deploy and sustain combat operations in expeditionary environments.

Current Situation

History has shown that predicting the next war is a difficult proposition. The vision for the transformed Army force was based in part on the premise that it would encounter similar small conflicts requiring rapidly deployable, mobile forces capable of short term sustainment; situations very similar to Haiti, Somalia, Bosnia, and Kosovo. During General Shinseki's term as Chief of Staff, the Army facilitated the removal of the Taliban Government in Afghanistan and fought a major State on State land battle to effect regime change in Iraq. The reality of wars in the 21st Century has not conformed to our 20th Century vision.

The concept of civilian contractors providing support to the armed forces in combat is not new. Logistics Civil Augmentation Program, or LOGCAP, even has its own Army regulation, whose purpose is to help logisticians "preplan for the use of civilian contractors to perform selected services in wartime to augment Army forces."¹⁶ Eight years of persistent conflict has led to a significant reliance on CLS to sustain deployed force strengths of over 150,000 in two separate Theaters. Today, CLS is both a necessity and a convenience.

Logistical Force Structure reductions led to the efficiencies and reduced "the size of the deployed footprint"¹⁷ envisioned through Army Transformation. Unfortunately, the

environment, scope, and operational tempo of deployed forces are not consistent with the original concept. In 2007, there were over 100,000 contractors operating in Iraq alone, compared to roughly 160,000 U.S. soldiers.¹⁸ The availability of contractors, and the skill with which the military has incorporated them into the warfighting team, has created a comfort zone for Army leaders looking to accommodate emerging force structure requirements. The result is a tendency to utilize CLS as a justification for reducing or rebalancing future logistics force structure. Currently we find, “the need for LOGCAP has increased as a result of reductions in military force structure and reallocation of CS and CSS manpower.”¹⁹ Examples of critical logistics functions fighting to retain their expeditionary roles are petroleum support and field feeding.

U.S. Army Theater Support Responsibilities

During the Army’s push to Baghdad early in OIF, “miracles occurred in distribution, where the pace of keeping up with combat units pushing north would have crushed a lesser logistic force.”²⁰ The Army’s expeditionary logistical responsibilities in OEF/OIF stemmed from three separate requirements - Executive Agency, Joint Staff taskings, and support to organic Army units. Executive Agency for specified theater logistical support is assigned to the Army by the Department of Defense (DoD) to reduce redundancy among Services during operations.²¹ These include responsibility for the DoD explosive safety board, mortuary affairs, and military postal matters.²² Joint Staff taskings include food safety and overland petroleum management.²³ Organic support to Army units includes supply, maintenance, transportation, and medical services. In the push to provide relief to overwhelmed logistical forces sustaining the fight, the Army Leadership may have lost its perspective on the major muscle moves performed by Combat Service Support units that enable CLS.

Contractors have taken advantage of the Army's logistical ground work over the past seven years. To a large extent, they have merely provided operators on government furnished equipment to reduce uniformed manpower in a politically sensitive environment. The logic that inspired Army Transformation is fueling the current assault on active component logistical force structure; the perception is that the future operational environment will resemble our current ones in Iraq and Afghanistan.

Theater Class III Bulk Management.

The Army will be responsible for petroleum support in any theater with significant deployed ground forces because it is the largest bulk petroleum consumer, and it has the unique organizations in its force structure to execute the mission. During OIF, the Army's proficiency in the area of class III bulk distribution was one of its biggest successes. Notwithstanding this accomplishment, the Army's active component petroleum management capability has been identified as a bill payer for rebalancing to the reserve components. During OIF "the 49th Petroleum Group (Petroleum and Water), owned the product and the fuel distribution system."²⁴ Their outstanding execution during OIF was not enough to prevent their demise. In Fiscal Year 2012, the 49th Petroleum Group will inactivate, removing the only remaining group level petroleum command and control capability in the active component.²⁵ As a result of the two Total Army Analysis (TAA) recommendations from TAA 10-15 and TAA12-17 on force structure, the active Army will no longer possess an Echelon's Above Corps petroleum command and control capability above the company level.²⁶ The Army did not simply decide the capability of the Petroleum Groups was unnecessary. The petroleum planning functions were migrated to the Expeditionary Sustainment Commands and

Theater Sustainment Commands, and the command and control function are now the responsibility of Sustainment Commands and Combat Service Support Battalions with assigned or attached petroleum units. This decision reflects the current experience that contractors can run petroleum operations, but that they are not equipped to plan them. Based on the Army's significant rebalancing of the petroleum units to the reserve component, we may be in the process of creating a petroleum capability gap that could affect our ability to execute future expeditionary logistical operations.

Field Feeding.

Food service is one of the most common logistical operations in the Department of Defense. Cooks are resident on more than 90% of Army units Table of Organization and Equipment (TO&E). Even with the advent of package meals, cooks are critical. Greater security and more predictable operations in OEF/OIF created an environment conducive to contracted food service operations. Currently, the majority of food service operations in Iraq and Afghanistan are operated by contractors. Once again, the effects of the current environment are being felt in the logistical community. The Combined Arms Support Command analyzed the Total Army Analysis 12-17 in the fall of 2009; they discovered a serious impact on enlisted Food Service Military Occupational Specialty, reducing spaces by almost 17% in the active component, and a total reduction in all three components of nearly 12%.²⁷ This reduction in Food Service personnel will significantly hamper the ability of the Army to conduct expeditionary fresh food operations in the future.

CLS Mission Creep

The Army's Transformed fighting force had the requirement to deploy a brigade anywhere in the world within 96 hours, and an entire division in 120 hours.²⁸ After

announcing his intent, General Shinseki set a bold timeline for the development of the prototype that would evolve into the Stryker Brigade Combat Team (SBCT). The system procurement for this organization employed a relatively new concept in Army logistics. The maintenance support for the Stryker would be performed by contractors, ostensibly to compensate for the relatively small organic maintenance capability.²⁹ CLS enabled the SBCT to achieve the objective of a small logistical footprint. However, having contractors as the principal maintainers of the critical maneuver combat system may prevent achievement of a 96 hour deployment objective, because contractors typically do not deploy with the same speed as Soldiers. Contract logistics support might also have a negative effect on the ability of Strykers to execute certain mission sets. In a 2006 Government Accountability Office report on Stryker vehicle maintenance support, Army officials admitted that having soldiers maintain the Stryker vehicles would enable them to execute the types of combat missions similar to the march to Baghdad during OIF.³⁰ The report also highlighted another issue relative to contracting for logistical support; gaining additional force structure when it is determined that soldiers are required to execute the mission.

As a result of the emergence of issues regarding the types of missions Stryker units could execute with CLS maintainers, the Army has relooked Soldier support for the critical combat systems. Based on the identified limitations, the Program Office has begun developing a partial transition of Stryker maintenance back to Soldiers. As part of this transition, the Army envisions adding 71 soldiers per SBCT.³¹ The Maintenance Force Structure managers in the Department of the Army will attempt to accomplish this in a very difficult resourcing environment. Finally, as the maintenance community

increases force structure to reduce contractor maintenance for Stryker vehicles, it appears they will ultimately increase the size of the support footprint. The increase of maintenance Soldiers might jeopardize the ability of the SBCT meet the 96 hour deployment window, but it will definitely increase the Stryker's ability to fight in any contingency.³²

Ultimately, reliance on contracted maintenance support has potentially limited the types of operations the SBCT can perform. Relying on CLS to reduce force structure demands during organizational design may complicate transitioning back to military support in the current end strength constrained environment.

LUH Arrives:

“There were two key components of the LUH program that led to such a rapid acquisition. The first component was the decision to accept a commercial/NDI system that would be civil certified by the Federal Aviation Administration. The second component was the decision to use Contractor Logistics Support (CLS) to maintain the aircraft and provide pilot and enlisted maintenance training.”³³

Like the Stryker vehicle, the Lakota Light Utility Helicopter (UH-72) is an Army program utilizing CLS to provide maintenance support to military aviation units operating the aircraft. The acquisition of the Lakota is a result of the Army's 2004 Aviation study which recommended the termination of the 22 year old, \$6.9 billion dollar Comanche Armed Reconnaissance Helicopter program, and the reinvestment of the remaining funds into other aviation programs.³⁴ On June 30, 2006, the Army awarded European Aeronautic Defense and Space (EADS) North America a contract to produce 345 Light Utility Helicopter's.³⁵ The purpose of the Lakota was to replace the aging UH-1 Huey and OH-58 Kiowa aviation systems, but it has also been utilized to replace some UH-60 Blackhawk systems.³⁶ While the bulk of Lakota airframes will go to National Guard

units. The Active Component is scheduled to field Lakota aircraft to non-critical units. The current mission sets of fielded Lakota airframes are medical evacuation, VIP transport, and security and support missions.³⁷ Based on the National Guard's broader mission set, UH-72s will most likely see additional service in natural disaster rescue operations as well as routine military operations. In the event of a mass flood of Mexican refugees fleeing into the U.S., the LUH will be a critical system required to perform multiple roles for the Army National Guard and Army Reserve.

The UH-72 program is unique and poses some interesting challenges for the Army as it integrates it into the aviation force. As opposed to current Army rotary wing assets, the UH-72 possesses an Air Worthiness Certificate from the Federal Aviation Administration.³⁸ This issue could pose problems for the Army as it attempts to incorporate new technologies on the airframes, while attempting to maintain the FAA certificate.³⁹ As the fielding progressed other concerns emerged; the reduced capability compared to the UH-60; the potential impacts of contracted maintenance on aviation enlisted retention and on training and operations; training availability for pilots and aviation maintenance personnel; and the ability of the aircraft to operate in all environments.

The first concern is with the capability of the Lakota. The Lakota will replace UH-60 Blackhawks in some locations. When it does, the result is a significant reduction in capability in both the personnel transport and medical evacuation role. The UH-60 Blackhawk is a mainstay of Army aviation due to the fact it is an exceptionally capable and flexible airframe. It can lift a maximum gross weight of 20,000 lbs., with a personnel capacity of 4 crewmembers and 11 equipped soldiers.⁴⁰ It also possesses the

capability of transporting 4500 lbs. of cargo or equipment externally utilizing a floor mounted cargo hook under the airframe.⁴¹ In contrast, the UH-72 Lakota is less capable with a max gross takeoff weight of 7,900 lbs., capacity for 3 crewmembers and 5 passengers, and an external cargo capability of 3,000 lbs.⁴² For those units utilizing the Lakota for medical evacuation missions, the disparity is more significant. The Blackhawk operating in a medical evacuation (MEDEVAC) role can transport 6 litter patients, while the Lakota can transport only two.⁴³ While transporting litter patients in the Blackhawk, access to patients is manageable. Flight medics operating in the two litter configuration of the Lakota have virtually no access to patients due to the lack of floor space to afford maneuver room between the two litters. Logic dictates that this reduction of patient transport capability in MEDEVAC units would require either an offsetting number of aircraft to compensate, or an increase in pilot and aircrew manning in units fielding the Lakota. Unfortunately, neither is forthcoming with the arrival of this airframe.

Part of the rationale for fielding the Lakota to active components was to place them in non-critical units. Yet one of the very first units to field the UH-72 was the National Training Center's Air Ambulance Detachment. Fort Irwin is the world's premier training location for three very important reasons; the most realistic and intense combined unit training in the world; one of the largest maneuver training areas in the Army inventory; and exposure to some of the most extreme environmental conditions for training found anywhere. One of the unavoidable results of such rigorous training is the potential for a major training related accident, possibly requiring a mass casualty evacuation. A complicating factor in responding to any training accident at Fort Irwin is

the potential that the accident could occur in the farthest corners of the training area, normally 20-30 minutes flight time from the NTC's Medical facility. With the reduced capability to transport patients, a 1 for 1 fielding of Lakota's in MEDEVAC units could potentially delay critical medical care for severely injured Soldiers. For Active component and National Guard units replacing Blackhawks with Lakota's, the loss in aircraft capability may represent a potential constraint to executing assigned missions.

The second concern is the potential for personnel retention problems associated with fielding the airframes. Lakota's were purchased to maximize the acquisition of aircraft with available resources. Contracted maintenance for LUH may have helped solve the procurement problem from a fiscal standpoint, but it had unintended effects at the unit level. First, the Lakota created retention issues within the initial units fielded the UH-72 and the CLS maintenance package. A Blackhawk air crewman serves both as a member of the flight crew during helicopter operations and as a mechanic on the aircraft during maintenance operations, which is his principle responsibility.⁴⁴ The contractor maintenance program removed a significant portion of the air crewman's daily mission, and restricted him to in-flight crew duties only. As the procurement and fielding expanded to National Guard units, the Project Office and EADS North America amended the dynamics of the maintenance program. They maintained the current full contractor maintenance program for active component units, and developed a Hybrid maintenance system for the Nation Guard units fielding UH-72s.⁴⁵ Key components of the hybrid maintenance model are: Soldier's conduct all field level maintenance, the contractor provides all tools, and that all work must be certified by a FAA certified mechanic.⁴⁶ National Guard airmen in units fielding the Lakota will find that becoming a

qualified Airframe and Powerplant (A&P) mechanic is not a guarantee, even for airmen with significant aviation maintenance experience. For example, a senior airman, with aviation maintenance supervisor duty requirements, must complete a 17 day training course and complete the process for obtaining an FAA A&P maintenance certificate before he is authorized to supervise maintenance on the Lakota.⁴⁷ Integral to the process is a requirement to interview with an FAA administrator, who is responsible for determining his experience and documented training.⁴⁸ Unfortunately, this process of maintenance certification is completely outside the military's control. One positive aspect of this situation is that the promotion of the FAA A&P certification program could potentially be used as a retention tool to entice soldiers in Lakota units to reenlist, based on the transferability of the certificate to the civilian commercial sector for future post-service employment.

The third concern is the availability of training for pilots and maintenance personnel in units transitioning to the UH-72. EADS North America's commercial training facility in Texas conducts authorized training for Lakota pilots and maintainers.⁴⁹ Pilot Training for the first units transitioning to the Lakota airframe was constrained because EADS was training Army pilots and commercial pilots at the same facility. Realizing the throughput problem as fielding extended to National Guard, the Army established a UH-72 pilot training program at the Eastern Army National Guard Aviation Training Site (EAATS) in Fort Indiantown Gap, Pennsylvania.⁵⁰ This program should enhance the throughput of pilots, enabling units to eventually attain 100% of their Modified Table of Organization and Equipment (MTO&E) authorization. Unfortunately, the Army's training program at EAATS will not cover certification training for aviation

maintenance personnel, resulting in a continued constrained training pipeline for critical capabilities as the National Guard fields more Lakotas.

The fourth concern involves the Lakota's ability to operate in any environment. Once again, the first location to field the airframe was Fort Irwin. The NTC is located south of Death Valley National Park in the high Mojave Desert of California. Initial flight tests at Fort Irwin exposed a serious shortfall. The Lakota's advanced glass cockpit avionics and control systems are susceptible to failure at temperatures above 104 degrees.⁵¹ This is a significant deficiency for units operating in an area with an average daily high temperature of 99 degrees from June through September, with virtually no cloud cover.⁵² These conditions, coupled with the glass cockpit of the Lakota, combine to create a hothouse effect which almost guarantees temperatures will exceed the operational capability of the avionics. The LUH Program Office's fix was to install air conditioning units in the six Lakota's assigned to the NTC's Air Ambulance Detachment, but did not authorize installation in the subsequent UH-72s fielded to the NTCs General Aviation Company. When Lakota avionics fail due to heat, there is the potential for unscheduled maintenance checks and repair. The Lakota's CLS costs are tied to flight hours, and any unscheduled maintenance can negatively impact flight hours for operation and training. Active component and National Guard units operating in areas with extreme summer temperatures could experience a reduction in flight hours during the summer months based on additional heat related maintenance requirements. Without installing environmental conditioning systems to every version of the Lakota, the Army could experience similar heat problems as it continues to field airframes to the

eight National Guard units in states located in Southern or arid climates, including Arizona and New Mexico.⁵³

Recommendations

“The police chief and all 38 officers of a Northeastern Mexican town have quit following a series of drug cartel attacks, including the decapitation of two of their colleagues.”⁵⁴

The situation in Mexico is deteriorating rapidly every day. The escalating drug violence continues to create safety concerns among Mexicans for their families and communities. There is an increasingly real prospect that drug related violence could lead to a significant flow of refugees fleeing into American Border States seeking security. In this event, the Army, primarily National Guard and Reserve units, will undoubtedly be called upon to conduct rescue, relief, and security operations in those Border States. Units fielded the UH-72 Lakota may not possess the required capability to fully execute the missions required to deal with this type of contingency. The Army's expanded use of CLS and maintenance has created a capability gap in critical systems required for these incidents, and potentially more serious expeditionary situations. For the Army to continue to provide the National Command Authority with the most flexible and capable force, they should consider the following actions.

First, define through Army doctrine a conditions-based framework for the introduction of support and services contractors onto the battlefield. Current contractor doctrine is mainly focused on ensuring that organizations follow the proper procedure to procure contracted support and services. The Army must define the security environment that is conducive to employing non-armed contract support and services personnel. The GAO report on Stryker contract maintenance pointed out, “soldier maintainers would improve the Stryker Brigades deployability in a broader range of

environments.”⁵⁵ Should the Stryker Brigades’ capabilities be required for future expeditionary contingencies, it is possible that their reliance on contracted maintenance could prevent them from being utilized to their fullest potential. The lesson learned from the development of the Stryker vehicle, and procurement of the UH-72, is that the acquisition methodology for a new system should be aligned with the employment methodology for that system. The Army must continue to ensure that the role of organic contractor maintenance does not create capability gaps in the forces fielding supported equipment.

Second, determine the minimum essential capability required to conduct expeditionary operations in both a mature and immature theater. History has taught us two lessons: It is nearly impossible to precisely predict the next conflict, and that the Army will always need to possess an expeditionary capability. With history in mind, the Army needs to substantively define those critical capabilities needed in the active component to support unforeseen expeditionary requirements. It is clear that recent petroleum force structure decisions “reduce early entry capabilities for contingency response.”⁵⁶ It is also obvious that maneuver and combat support force structure managers view military food service soldiers as a potential resource to meet reduction targets during the TAA process. Logistical force structure managers continue to fight to retain critical capability, but the effectiveness of contracted logistical support, and perception of its continued applicability into the foreseeable future make the fight almost unwinnable.

Third, the Army must ensure that acquisition programs for new equipment develop detailed recommendations for future military maintenance capability if

contractor provided maintenance is part of the procurement. Recent experience with the Lakota proves that Soldier maintenance of Army equipment will ultimately prevail at the Field Maintenance level. Based on this fact, it is prudent to plan for soldier provided maintenance for two reasons. First, planning for Soldier maintenance enables support entities to develop programs and reduces the impact on the institutional training base's ability to facilitate the transition. Had the LUH Program Office envisioned the hybrid maintenance model during the procurement of the UH-72, it is likely the Army National Guard could have established a certified Airframe and Powerplant maintenance course to support the fielding of the Lakota to National Guard units. This situation also existed with inadequate manufacturer provided pilot transition flight training. The National Guard was able to react to the inadequate training slots as it began to field the Lakota, and was able to develop four pilot training programs, certifying pilots from basic aircraft qualification to Instructor pilots.⁵⁷ Second, the force managers in the Department of the Army G-3/5/7 must maintain situational awareness of future force structure requirements for systems utilizing contracted maintenance. These professionals maintain the vision of future requirements, and can advise weapon system program offices on the realities of the force structure environment. When it becomes critical to transition to Soldier maintenance, this is the organization that will advocate for new manpower requirements to enhance existing maintenance organizations, or create new ones.

Conclusion

Contracting for Army logistic support and services is a great idea. Anyone who thinks it is not is being unrealistic. What leaders need to know above all else, is that CLS has limitations. Ignoring those limitations can create problems like gaps in critical

expeditionary war fighting capability, and complications trying to reestablish that capability in the current and future force structure environments. The Army will continue to be America's choice to execute forceful U.S. diplomacy in inhospitable places around the world. It will also rely on a significant amount of contracted logistical support for the foreseeable future. What the Army must ensure, is that it lives up to its responsibility to the Nation by fielding a force capable of responding to any crisis, and sustaining the mission with the right capabilities to enable it to "dominate across the full spectrum of operations."⁵⁸

Endnotes

¹ General Erick K. Shinseki, Address to the Eisenhower Luncheon, 45th Annual Meeting of the Association of the United States Army, Washington, D.C., October 12, 1999.

² Jennifer Griffin & Laura Prabucki, "America's Third War: Mapping the Drug Cartels," November 19, 2010, linked from *The Fox U.S. News Home Page* at "U.S. News," <http://www.foxnews.com/us/2010/11/19/americas-third-war-mapping-mexican-drug-cartels/> (accessed February 19, 2011).

³ *The Los Angeles Times World News Home Page*, <http://projects.latimes.com/mexico-drug-war/#/its-a-war> (accessed 30 Nov, 2010).

⁴ Alfredo Cochado, "Obama condemns U.S. consulate killings in Mexico," March 15, 2010, Linked from *The Dallas Morning News Home Page* at <http://www.dallasnews.com/sharedcontent/dws/dn/latestnews/stories/031410dnintmexicoconsulate.1a8bdb848.html> (accessed 30 November, 2010).

⁵ Ken Ellingwood, "Mexico vs. Drug gangs: A deadly clash for control", June 3, 2008, Linked from *The Los Angeles Times homepage* at <http://www.latimes.com/news/nationworld/world/la-me-haven2,0,1246611.story> (accessed 10 Nov, 2010).

⁶ Rory Carroll, "Mexican newspaper asks drug cartels how to prevent its staff being murdered" September 20, 2010. Linked from *The Guardian Home Page* at <http://www.guardian.co.uk/world/2010/sep/20/mexican-newspaper-drugs-staff-murdered> (accessed on 30 November, 2010).

⁷ Congressional Research Service, *U.S. International Borders: Brief Facts* (Washington, DC: U.S. Congressional Research Service, November 2006), 1.

⁸ Mark J. Reardon and Jeffery A. Charlston, *From Transformation to Combat: The First Stryker Brigade at War* (Washington, D.C : Center for Military History, 2007), 1.

⁹ Michael R. Gordon and General Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (New York; Pantheon Books, 2006), 53.

¹⁰ Shinseki, Address to the Eisenhower Luncheon, 45th Annual Meeting of the Association of the United States Army.

¹¹ Benjamin S. Lambeth, "Task Force Hawk", *Air Force Magazine*, Vol 85, issue 2 (February 2002), 78.

¹² Ibid, 79.

¹³ Ibid.

¹⁴ Ibid, 80.

¹⁵ Ibid.

¹⁶ U.S. Department of the Army, Logistics Civil Augmentation Program, Army Regulation 700-137 (Washington, DC: Department of the Army, 16 December 1985), 1.

¹⁷ Shinseki, Address to the Eisenhower Luncheon, 45th Annual Meeting of the Association of the United States Army.

¹⁸ James J. Carafano, "Private Sector, Public Wars: Contractors in Combat – Afghanistan, Iraq, and Future Conflicts" <http://psi.praeger.com/doc.aspx?d=/books/gpg/C9478/C9478-0053.xml> (accessed 27 October, 2010).

¹⁹ Colonel Karen E. LeDoux, "LOGACP 101: An Operational Planner's Guide," *Army Logistician*, vol 37, issue 3 (May-June 2005), 25.

²⁰ The Army's Theater Level Logistical support operated at an extremely high level during the push to Baghdad. Every capability utilized to successfully fight during the initial stages of OIF was established and operated by uniformed Military Members. As the security environment in Iraq stabilized, the Army was able to incorporate contractors to facilitate steady state logistical operations. The fact that Army units established these capabilities seems to be largely forgotten as Army leadership continues to value contracting for capabilities as a potential substitution for actual Force Structure. Suzi Thurmond, "Analyzing the lessons of OIF distribution," *Army Logistician*, vol 36, issue 4 (July–August 2004), 3.

²¹ Office of the Administrative Assistant to the Secretary of the Army Webpage, <http://www.oaa.army.mil/executiveagent.aspx> (accessed Jan 27, 2011).

²² Department of the Army Memorandum 10-1, *Executive Agent Responsibilities Assigned to the Secretary of the Army* (Washington, DC: Headquarters, Department of the Army, January 15, 1997), 1.

²³ U.S. Department of the Army, *Theater Distribution*, Field Manual 100-10-1 (Washington, DC: Department of the Army, October 1, 1999), B-3.

²⁴ Ibid.

²⁵ Colonel Phillip D. VonHoltz, “Outlook For Army Mobility Fuels Post TAA 12-17”, briefing slides with scripted commentary, Fort Lee, VA, Quartermaster Symposium, June 17, 2010.

²⁶ Ibid.

²⁷ Analysis conducted CASCOM Force Design directorate

²⁸ ²⁸ Shinseki, Address to the Eisenhower Luncheon, 45th Annual Meeting of the Association of the United States Army.

²⁹ Jeff Wagner, “Stryker Integrated Logistics Support Program Brief” linked *from Stryker Brigade Combat Team Project Management Office Home Page* at Styker Logistics http://www.sbct.army.mil/images/downloads/Stryker_Logistics.pdf (accessed 29 October 2010)

³⁰ U.S. Government Accountability Office, *Defense Logistics: Changes to the Stryker Maintenance Support Should Identify Strategies for Addressing Implementation Challenges* (Washington, DC: U.S. Government Accountability Office, September 2006), 5.

³¹ Ibid, 6.

³² Ibid, 7.

³³ Col L. Neil Thurgood and LTC David Bristol, “UH-72: A Key Component of Army Aviation Modernization”, *Army AL&T Magazine*, (April-June 2010): 34.

³⁴ *Global Security homepage*, <http://www.globalsecurity.org/military/systems/aircraft/rah-66.htm>, (accessed 29 October, 2010)

³⁵ *EADS North America UH-72 Lakota Home Page*, <http://www.uh-72a.com/about/program-overview.asp> (accessed November 9, 2010)

³⁶ U.S. Army Aviation Center of Excellence home page, http://www.rucker.army.mil/docs/usaace_info/USAACE%20Info%20Paper%20TCM-L%20Helicopter%20UH-72A%2022%20Mar%2010.pdf (accessed November 6, 2010)

³⁷ Ibid.

³⁸ LTC David Bristol, “UH-72 Lakota Light Utility Helicopter,” briefing slides with commentary, pg 7.

³⁹ The Army has historically procured aviation assets based on performance and capability criteria. Several of the current Army airframes do not possess Federal Aviation Administration Airworthiness certificates. One potential rationale for procuring requirement for an FAA certificate is the Army is not expecting a long military service life for the aircraft, and desires to make the keep the airframe attractive to potential civilian buyers who will require the certificate to operate in them commercially.

⁴⁰ U.S. Army.mil Home Page, <http://www.army.mil/factfiles/equipment/aircraft/blackhawk.html>

⁴¹ U.S. Army Aviation Center of Excellence home page
http://www.rucker.army.mil/docs/usaace_info/USAACE%20Info%20Paper%20TCM-L%20Helicopter%20Blackhawk%20UH-60M%2022%20Mar%2010.pdf (accessed November 6, 2010)

⁴² LTC David Bristol, "UH-72 Lakota Light Utility Helicopter", 13-18.

⁴³ *Global Security homepage*, <http://www.globalsecurity.org/military/systems/aircraft/u-60q.htm> (accessed November 6, 2010)

⁴⁴ U.S. Army Recruiting Command Home Page, <http://goarmy.com/careers-and-jobs/browse-career-and-job-categories/transportation-and-aviation/u-60-helicopter-repairer.html>

⁴⁵ LTC David Bristol, "UH-72 Lakota Light Utility Helicopter", 24

⁴⁶ Ibid, 24.

⁴⁷ Ibid, 42.

⁴⁸ Ibid.

⁴⁹ U.S. Army Aviation Center of Excellence home page,
http://www.rucker.army.mil/docs/usaace_info/USAACE%20Info%20Paper%20TCM-L%20Helicopter%20UH-72A%2022%20Mar%2010.pdf (accessed November 6, 2010).

⁵⁰ Ibid.

⁵¹ Aaron C. Davis. "AP: Relief Copter unsafe in heat, army says," January 9, 2007,
<http://abcnews.go.com/images/Blotter/Pages%20from%20UH-72A%20LUH%20BLRIP%20%20July%202007.pdf> (Accessed 6 December 2007)

⁵² *The Go-California Home Page*, <http://www.go-california.com/Mojave-Desert/Weather> (accessed 19 February, 2011)

⁵³ LUH Program Manager fielding plan

⁵⁴ *The Fox News World News Home Page*,
<http://www.foxnews.com/world/2011/01/27/mexican-towns-cops-quit-colleagues-beheaded/> (accessed January 27, 2011)

⁵⁵ ⁵⁵ U.S. Government Accountability Office, *Defense Logistics: Changes to the Stryker Maintenance Support Should Identify Strategies for Addressing Implementation Challenges*. (Washington, DC: U.S. Government Accountability Office, September 2006), 5.

⁵⁶ Colonel Phillip D. VonHoltz, "Outlook For Army Mobility Fuels Post TAA 12-17", briefing slides with scripted commentary, Fort Lee, VA, Quartermaster Symposium, June 17, 2010.

⁵⁷ *Eastern Army National Guard Aviation Training Site Home Page*,
<http://www.arng.army.mil/EASTERNAATS/web1/ftrn/index.html>, (accessed November 17, 2010)

⁵⁸ Shinseki, Address to the Eisenhower Luncheon, 45th Annual Meeting of the Association of the United States Army.